

**PATENT ABSTRACTS OF JAPAN**

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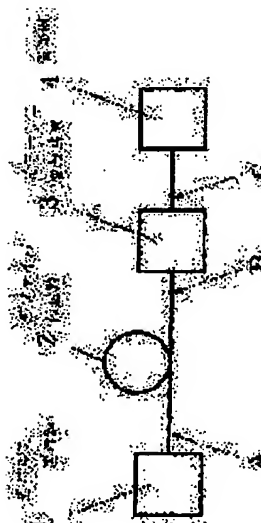
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NAKAZAWA MASATAKA**(54) OPTICAL TRANSMISSION METHOD AND DEVICE****(57)Abstract:**

**PROBLEM TO BE SOLVED:** To compensate waveform distortion by using characteristic that, even if every linear distortion occurs on a time base, a spectrum shape is perfectly preserved.

**SOLUTION:** An optical pulse which has been transmitted via an optical fiber transmission path 2 from an optical pulse transmitter 1 is transmitted. An optical Fourier transforming device 3 compensates the waveform distortion by linear effects in the optical fiber transmission path 2 by making the optical pulse incident, performing optical Fourier transformation with the optical pulse on the time base onto a frequency axis, replacing frequency with time, and reproducing the frequency spectrum of the optical pulse on the time base. A photodetector 4 obtains the pulse waveform before transmission by the optical fiber transmission path 2 by receiving the optical pulse from the optical Fourier transforming device 3 and transforming this to an electrical signal.

**LEGAL STATUS**

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